| <br> | <b>.</b> | aims |  |
|------|----------|------|--|
|      |          |      |  |

| App | licatio | n/Control | No. |
|-----|---------|-----------|-----|
|-----|---------|-----------|-----|

10/520,262 Examiner

Toan Ton

Applicant(s)/Patent under Reexamination

LEE ET AL.

Art Unit

2871

| √ | Rejected |
|---|----------|
| = | Allowed  |

| 1 | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| + | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| _ | Interference |

| A | Appeal   |
|---|----------|
| 0 | Objected |

| Claim  |          |          |          |          |                |          |          |  |  |          |   |            |            |          |                     |          |          |          |           |          |          |          | _         |              |          |          |          |          |          |          |                 |              |
|--|----------|----------|----------|----------|----------------|----------|----------|--|--|----------|---|------------|------------|----------|---------------------|----------|----------|----------|-----------|----------|----------|----------|-----------|--------------|----------|----------|----------|----------|----------|----------|-----------------|--------------|
| 1  | Cla      | aim      | <u> </u> |          |                |          | Dat      | e  |  |          | _                                       | _          | Claim Date |          |                     |          |          |          |           |          | _        | Cla      | aim       | Date         |          |          |          |          |          |          |                 |              |
| Second   S | Final    | Original | 4/17/06  |          |                | İ        |          |  |  |          |   |            | Final      | Original |                     |          |          |          |           |          |          |          |           | Final        | Original |          |          |          |          |          |                 |              |
| Second   S |          | 1        | J        |          |                |          | 1        | T  |  | $\vdash$ |   |            |            | 51       | $\exists$           | ╅        | 7        | 7        | $\dashv$  |          | 寸        | 寸        | $\neg$    |              | 101      |          |          |          |          |          |                 | 十            |
| 3   \( \frac{1}{4} \) \( \frac{1}{3} \) \( \frac{1}{4} \) \( \frac{1}{3} \) \( \fr |          |          |          |          | _              | $\vdash$ | $\vdash$ | 1  |  |          |   |            |            |          |                     |          | 寸        |          | T         |          |          | 寸        | $\neg$    |              |          |          |          |          |          |          |                 | 十            |
| 4     √     54     104     155     105     105     105     105     106     106     106     107     107     107     108     108     108     108     109     100     100     100     100     100     100     100     100     100     100     100     110     100     110     100     110     100     110     1110     1110     1110     1111     112     112     663     663     1113     144 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>T</td> <td></td> <td>1</td> <td>T</td> <td><math>\neg</math></td> <td></td> <td></td> <td>103</td> <td>П</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>T</td>   |          |          |          |          |                |          |          | T  |  |          |   |            |            |          |                     |          |          |          |           | 1        | T        | $\neg$   |           |              | 103      | П        |          |          |          |          |                 | T            |
| 5  |          |          |          |          | Г              |          |          | T  |  |          |   |            |            |          |                     |          |          | П        | $\Box$    |          |          |          |           |              |          |          |          |          |          |          |                 |              |
| 6 √     √     106     107       7 √     57     107     107       8 √     59     109     108       9 100     60     110     111       11 1     61     111     111       12 2     62     1112     112       13 3     63     113     113       14 4     64     114     114       15 5     65     65     115       16 6     66     116     117       17 1     67     117     117       18 68     118     118     118       19 68     119     120     120       21 72     72     122     122       23 3     73     123     123       24 4 74     74     124     124       25 5     75     75     125       26 77     77     127     127       28 77     77     127     127       28 72     78     128   |          | 5        |          |          |                |          |          | T  |  |          |   |            |            | 55       |                     |          | $\neg$   | 丁        | T         |          |          |          | $\Box$    |              | 105      |          |          |          |          |          |                 | $\Box$       |
| 7           57           107           8           108           9     100           109           109           109           109           109           109           109           109           109           109           109           109           109           109           100           110           110           110           110           110           110           110           110           110           111     111     111           112           112           113           114           114           114           115           66     66           116           117           117           117           117           117           117           117           117           117   |          | 6        |          |          |                |          |          | П  |  | Π        |   |            |            |          |                     |          |          | Т        |           |          |          |          |           |              |          |          |          |          |          |          |                 | $\Box$       |
| 9 10 60 110 111 111 1 61 111 1 111 1 111 1 111 1 111 1 111 1 111 1   |          | 7        |          |          |                |          |          |  |  |          |   |            |            |          |                     |          |          |          |           |          |          |          |           |              |          |          |          |          |          |          |                 | $\Box$       |
| 10   |          |          | ✓        |          |                |          | <u> </u> |  |  |          |   |            |            |          |                     |          | $\perp$  | $\Box$   |           | 1        |          |          |           |              |          | Ш        |          |          |          |          | Ш               |              |
| 11     12     61     111     112     113     111     112     113     113     113     113     113     113     113     113     114     115     115     115     116     66     115     116     66     1116     116     66     1116     117     68     118     118     118     118     118     119     120     170     120     121     121     121     122     125     126     127     127     127     128     128     128     128   |          |          | 乚        |          | L              | <u> </u> | _        | 丄  | ╙  | L        |   | L          |            |          |                     |          | _        | _        | _         | _        | _        |          | _         |              |          |          |          |          |          |          | $\sqcup$        | $\perp$      |
| 12   |          |          | L        |          |                | _        | <u> </u> | <u> </u>   |  |          |   | L          |            |          |                     |          | _        |          | 4         | _        | _        | _        | _         |              |          | Щ        | _        |          |          |          | $\sqcup$        | 4            |
| 13   |          |          |          |          | ļ              | _        | ļ        | <u> </u>   | ļ  | <u> </u> |   | L          |            |          |                     | _        | _        | 4        | -         | _        | _        | _        | ᆜ         | L            |          | Ш        |          | L.       |          |          | $\vdash$        | 4            |
| 14     15     64     114     115       16     66     116     116     117     118     66     1116     117     118     118     118     118     119     119     119     120     121     121     122     122     122     122     122     122     123     123     124     124     124     124     124     124     124     124     124     125     125     126     127     127     75     125     126     127     127     77     127     77     127     77     127     77     127     77     127     77     127     77     127     77     127     77     127     77     127     77     127     77     127     77     127     77     127     77     128     128     128     128     128     128     129     130     130     131     131     131     131     131     131     131     131   | <u></u>  |          | <u> </u> |          | <u> </u>       | <u> </u> | <u> </u> | ↓  |  | ┡        |   | -          |            |          | $\Box$              |          | 4        | +        | -         | 4        | _        | -        |           | L            |          | Щ        | _        |          |          | _        | $\vdash$        | +            |
| 15   | <u> </u> |          | $\vdash$ | <u> </u> | ⊢              | _        | ₩        | ┼  | ├-   | <u> </u> | $\Box$                                  | <b> </b>   |            |          | $\vdash \vdash$     | -+       | $\dashv$ | +        | $\dashv$  | -        | $\dashv$ |          |           |              |          | Н        | <u> </u> | $\vdash$ | <u> </u> | $\vdash$ | $\vdash$        | +            |
| 16     17     66     117     116     117     118     117     118     117     118     118     118     118     118     118     119     120     1119     120     121     120     121     120     121     120     121     121     122     123     122     123     122     123     124     124     124     124     124     125     126     126     126     127     127     127     128     128     129     129     129     129     129     129     129     130     131     131     131     131     131     131     131     132     133     133     133     133     133     133     133     133     133     133     133     133     133     133     134     134     134     134     134     134     134     135     135     135     135     136     136     136     136     136     136     137     137  | $\vdash$ |          | $\vdash$ | -        | <del>  -</del> | -        | $\vdash$ | +-   | ├  | $\vdash$ |   |            |            |          | $\vdash$            | +        | +        | +        | $\dashv$  | $\dashv$ | $\dashv$ |          | {         | <b> </b>     |          | Н        | ⊢        | H        |          |          | $\vdash$        | +            |
| 17     18     67     117     118     118     118     118     118     118     118     118     118     118     118     119     120     120     120     121     120     121     121     122     122     122     122     123     123     123     124     124     125     125     125     125     125     126     127     127     128     127     128     128     127     128     129     130     130     130     131     130     131     131     131     133   | -        |          | ⊨        |          | -              |          | ┢        | ├-   | ╁  | ⊢        |   | ⊢          |            |          | $\dashv$            | -        |          | -+       | $\dashv$  | -        | +        | -+       | $\dashv$  |              |          | H        | _        |          |          | -        |                 | +            |
| 18   19   68   118   119   119   119   119   120   120   120   120   120   121   120   121   121   121   121   121   121   121   122   123   123   123   123   123   123   124   124   124   124   124   124   124   125   126   126   127   77   127   77   127   77   127   78   128   128   129   129   129   130   130   131   131   131   131   131   131   131   131   131   131   132   133   133   133   133   133   133   133   133   134   135   135   135   135   136   137   137   137   137   137   |          |          | $\vdash$ | _        |                | -        | ├        | ╁┈   | ╁  | $\vdash$ |   | -          |            |          | -                   | +        | +        | +        | $\dashv$  | -+       | -+       | -+       |           | -            |          | H        | _        | Н        | _        |          | $\vdash$        | +            |
| 19   | <u> </u> |          |          |          |                | ⊢        | ┢        | ┢  | ╫  | -        |   | ⊢          |            |          | $\dashv$            | ╅        | $\dashv$ | ┰        | -+        | -        | $\dashv$ | $\dashv$ | $\neg$    |              |          | Н        |          | Н        |          | -        | -               | +            |
| 20     21     70     71     120     121     121     122     122     122     122     122     123     123     123     123     123     123     123     124     124     125     125     125     125     125     125     126     126     127     127     128     127     128     129     129     130     130     130     130     130     130     130     131     131     131     131     131     131     131     132     133     134     134     134     134     134     134     134     135     136     137     137     136     137     137     136     137     137     138     138     138     139     139     140     141     141  |          |          |          | -        |                | ┢╌       | ┢┈       | $\vdash$   | -  |          | $\dashv$                                |            |            |          | $\vdash$            | -        | +        | +        | +         | $\dashv$ | ┪        | $\dashv$ | ᅱ         |              |          |          | -        | Н        |          |          | $\vdash$        | +            |
| 21     22     72     121     122     123     123     123     123     123     123     123     123     123     123     124     124     124     124     124     125     126     126     126     126     126     126     126     127     127     127     127     128     128     129     130     133   |          |          | -        |          | -              | ┢        | ┢        | ┢  | $\vdash$   | -        | $\dashv$                                | H          | $\dashv$   |          | $\dashv$            | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$  | $\dashv$ | -+       | -        | -         |              |          | H        |          | -        |          | -        | $\vdash$        | +            |
| 22     72     73     122     123     123     124     124     124     124     124     124     124     125     125     125     126     126     126     127     127     127     127     127     128     129     129     129     130     130     130     130     130     130     131     131     131     131     131     132     132     132     132     133     133     133     134     134     134     134     134     134     134     134     134     134     134     135     135     135     135     135     135     135     136     136     136     137     137     138     138     138     138     139     140     140     141     141     141     141     141     141     142     142     142     142     143     143     144     144     144     144     144     144     144     144     144   |          |          |          |          | -              | ╁        | ╁        | $\vdash$   | $\vdash$   |          | $\dashv$                                | H          |            |          | $\dashv$            | $\dashv$ | +        | 7        | 7         | $\dashv$ | $\dashv$ | $\dashv$ | _         |              |          | Н        |          | Н        |          |          | $\vdash$        | +            |
| 23   73   123   124     25   75   125   126     26   76   126   127     28   77   127   128   129     30   80   130   130   131   131   131   131   131   132   132   132   132   133   133   133   133   133   133   133   133   134   134   134   134   134   134   134   134   135   136   136   137   137   137   137   137   138   138   138   138   139   140   141   141   141   141   141   141   141   142   143   144   144   144   144   144   145   145   146   146   147   147   148   149  |          |          | $\vdash$ |          |                | $\vdash$ | $\vdash$ | ┪  | $\vdash$   |          | $\dashv$                                | r          |            |          |                     | 十        | -        | -+       | 7         | _        | _        | +        | -         |              |          | Н        |          |          |          |          | _               | 十            |
| 24     74     124     125     125     126     125     126     126     126     126     126     127     127     127     127     127     128     128     129     129     129     130     130     130     131     131     131     131     131     131     132     133     133     133     133     133     133     133     133     133     133     134     134     135     135     135     136     136     137     137     137     137     137     138     139     139     139     139     139     140     141     141     141     142     143     144     144     144     144     144     144     144     145     146     146     147     148     148     148     148     149     149     149     149     149     149     149     149     149     149     149     149     149     149     149     149  |          |          | H        |          |                | ┢        | Т        | 1  | <del>                                     </del> |          | $\neg$                                  | <b> </b>   |            |          | $\dashv$            | $\dashv$ |          | 十        | 7         | $\dashv$ | _        | _        |           |              |          | Н        | _        | П        |          |          | $\sqcap$        | 十            |
| 25     75     125     126     126     126     126     126     127     127     127     127     128     128     129     129     129     129     130  |          |          |          |          | _              | _        |          | t  | $\vdash$   |          |   |            |            |          | $\Box$              | 一        |          | _        |           | 寸        |          | $\neg$   |           |              |          | П        |          |          |          |          |                 | 寸            |
| 26 76 126   27 128 77   28 79 129   30 80 130   31 81 131   32 82 132   33 83 133   34 84 134   35 86 135   36 86 136   37 88 138   39 89 139   40 90 140   41 91 141   42 92 142   43 94 144   45 96 146   47 98 148   48 99 149  |          |          |          |          |                | Г        |          | T  | T  |          |   |            |            |          |                     | $\neg$   |          |          |           |          |          |          |           |              |          | П        |          |          |          |          |                 | T            |
| 28   78   128     29   80   129     30   81   130     31   81   131     32   82   132     33   83   133     34   84   134     35   85   135     36   86   136     37   88   138     39   89   139     40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   96   145     46   96   146     47   97   148     48   98   149  |          |          |          |          |                |          |          | T  | 1  |          |   |            |            | 76       |                     |          |          | $\neg$   | T         | 丁        |          |          |           |              |          |          |          |          |          |          | П               | T            |
| 29   79   129     30   130   130     31   81   131     32   82   132     33   133   133     34   84   134     35   85   135     36   86   136     37   88   136     39   88   138     39   90   140     41   91   141     42   92   142     43   94   144     44   94   144     45   96   146     47   97   147     48   98   148     49   99   149  |          |          |          |          |                |          | l        |  | Ī  |          |   |            |            |          |                     |          |          |          |           |          |          |          |           |              |          |          |          |          |          |          |                 | $\Box$       |
| 30 80   31 81   32 83   33 84   35 85   36 85   37 87   38 88   39 89   40 90   41 91   42 92   43 94   44 94   45 96   46 96   47 97   48 98   49 99  |          |          |          |          |                |          |          |  |  |          |   |            |            |          |                     |          |          |          |           |          |          |          |           |              |          |          |          |          |          |          |                 |              |
| 31 81   32 131   33 132   33 133   34 84   35 86   36 86   37 87   38 88   39 136   40 90   41 91   42 92   43 94   44 94   45 96   46 96   47 97   48 99   49 148   49 149  |          |          |          |          |                | L        | _        | ┖  | $oxed{oxed}$                                     |          |   | L          |            |          | $\Box$              |          |          |          |           | _        |          |          |           |              |          |          |          |          |          |          |                 |              |
| 32 82   33 132   34 84   35 85   36 86   37 87   38 87   39 88   40 90   41 91   42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 149  |          |          |          |          |                | L        | L        | <u> </u>   | <u> </u>   |          |   | L          |            |          |                     | _        |          | _        | _1        | _        |          |          |           |              |          |          |          |          |          |          | Ш               | _            |
| 33 83   34 84   35 85   36 86   37 88   39 88   40 90   41 91   42 92   43 93   44 94   45 96   47 98   48 99   49 99   148 99   148 149   | L        | 31       |          |          | L              | _        | <u> </u> | <u> </u>   | _  |          |   | L          |            |          |                     | _        |          | _        | _         | _        | _        | _        | _         | L            |          | Щ        |          |          |          |          | $\vdash$        | _            |
| 34 84   35 85   36 86   37 87   38 88   39 89   40 90   41 91   42 92   43 94   44 94   45 96   46 96   47 98   48 99   49 148   49 149  |          |          | Ш        |          | L              | _        | <u> </u> | <u> </u>   | _  |          |   | L          |            |          | $\sqcup$            | $\dashv$ | _        | 4        | 4         | $\dashv$ | _        | _        | _         |              |          | Щ        | <u> </u> |          |          |          | $\vdash \vdash$ | $\dashv$     |
| 35 85   36 135   37 87   38 88   39 89   40 90   41 91   42 92   43 94   44 94   45 95   46 96   47 97   48 98   49 148   49 149   |          |          | Н        |          | <u> </u>       | $\vdash$ | $\vdash$ | 1  | $\vdash$   |          |   | -          |            |          | $\vdash \vdash$     | $\dashv$ | $\dashv$ | 4        | 4         | _        |          |          |           |              |          | Ш        | <u> </u> | $\sqcup$ |          |          | $\vdash$        | +            |
| 36   37   86   136   137   137   137   138   138   138   138   139   139   139   140   140   140   140   140   141   141   141   141   141   141   141   142   142   142   143   144   144   144   144   144   145   146   146   147   147   148   148   148   149   140   140   140   141   141   141   141   141   141   141   141   141<  | -        |          | 1—       | _        | $\vdash$       | Ŀ        | $\vdash$ | ├-   | -  |          |   | -          |            |          | $\vdash \downarrow$ | +        | -        | +        | 4         | $\dashv$ |          | $\dashv$ | $\dashv$  |              | 134      | Н        | <u> </u> | Н        |          |          | $\vdash \vdash$ | +            |
| 37   87   137     38   88   138     39   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149  |          |          | $\vdash$ |          | <u> </u>       | -        | ├        | ⊢  | ⊢  |          | $\dashv$                                | -          |            |          | $\vdash$            |          | +        | $\dashv$ | +         | $\dashv$ | $\dashv$ | -        | 4         | <del> </del> |          | Н        |          | Н        |          | $\vdash$ | $\vdash$        | +            |
| 38   88     39   90     41   91     42   92     43   93     44   94     45   95     46   96     47   97     48   98     49   148     49   149  |          |          | $\vdash$ |          |                | $\vdash$ | $\vdash$ | ┼-   | ┼  | ├        |   | <b> </b> - |            |          | $\vdash$            | $\dashv$ | +        | +        | $\dashv$  | }        |          | $\dashv$ | $\dashv$  |              |          | Н        | <u> </u> | $\vdash$ |          |          | $\vdash$        | +            |
| 39   89   139     40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149  |          |          | $\vdash$ |          |                | $\vdash$ | $\vdash$ | +  | $\vdash$   | $\vdash$ | $\dashv$                                |            |            |          | $\vdash$            | -        | +        | $\dashv$ | +         | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$  | <b></b>      |          | $\vdash$ | <u> </u> | Н        |          | -        | $\vdash$        | +            |
| 40 90   41 91   42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 99  |          |          | $\vdash$ |          | H              | $\vdash$ | $\vdash$ | +-   | -  | -        |   | <b> </b> - |            |          | $\vdash$            | $\dashv$ | +        | $\dashv$ | $\dashv$  | -        | +        | $\dashv$ | $\dashv$  |              |          | H        | $\vdash$ | Н        | $\vdash$ | $\vdash$ | -               | +            |
| 41 91   42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 99  |          |          | $\vdash$ |          | -              | $\vdash$ | +-       | ╁  | $\vdash$   | $\vdash$ | $\dashv$                                | <br> -     |            |          | $\vdash$            | -+       | $\dashv$ | $\dashv$ | $\dashv$  | $\dashv$ | $\dashv$ | +        | $\dashv$  | $\vdash$     | 140      | $\vdash$ |          | H        |          |          | $\vdash$        | +            |
| 42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 99  | $\vdash$ | 41       | Н        |          | H-1            | $\vdash$ | t        | t  | ╁  |          |   | <b> </b>   |            | 91       | $\vdash$            | $\dashv$ | 十        | +        | +         | $\dashv$ | $\dashv$ | -+       | $\dashv$  |              | 141      | Н        | <u> </u> | Н        | $\vdash$ | H        | o               | +            |
| 43 93   44 94   45 95   46 96   47 97   48 98   49 99  |          |          | Н        | -        |                | $\vdash$ |          | <del>                                     </del> | 广  |          |   |            |            |          | $\vdash$            | $\dashv$ | 十        | 7        | 7         | $\dashv$ | _        | 寸        | $\dashv$  |              |          | H        |          | H        | $\vdash$ | -        | o               | $\dashv$     |
| 44 94   45 95   46 96   47 97   48 98   49 99  |          | 43       | П        | _        |                | Г        | T        | t  | ţ٠   | Ħ        | $\dashv$                                |            |            | 93       |                     | $\dashv$ | $\top$   | 寸        | 寸         | $\dashv$ | $\dashv$ | $\dashv$ | ᅱ         |              | 143      | П        |          | П        |          |          | $\sqcap$        | 十            |
| 45 95   46 96   47 97   48 98   49 99  |          |          |          |          |                | Г        | T        |  |  |          |   |            |            |          |                     | $\dashv$ | $\neg$   | 十        | 7         |          | 7        | 寸        | $\exists$ |              |          | П        |          | П        |          |          | $\sqcap$        | $\top$       |
| 46   |          | 45       | П        |          |                |          | T -      |  | Г  |          |   |            |            | 95       |                     | $\top$   | $\dashv$ | 寸        | $\exists$ | $\dashv$ | $\dashv$ |          | $\neg$    |              | 145      | П        |          | П        |          |          | 一               | $\top$       |
| 47 97   48 98   49 148   149 149   |          | 46       | П        |          |                |          | Π        |  |  |          |   |            |            | 96       |                     | $\neg$   | $\neg$   | 7        | $\exists$ | $\dashv$ |          |          | ╗         |              | 146      |          |          |          |          |          | $\Box$          | $\exists$    |
| 49 99 149 149  |          |          |          |          |                |          |          |  |  |          |   |            | 1          | 97       |                     |          |          | I        |           |          |          |          | _]        |              |          |          |          |          |          |          |                 |              |
| 49   |          | 48       |          |          |                |          |          |  |  |          |   |            |            | 98       |                     |          |          |          |           |          |          |          |           |              | 148      |          |          |          |          |          |                 | $\Box$       |
| 50   |          |          |          |          |                |          |          |  |  |          |   |            |            | 99       |                     |          | $\Box$   | $\Box$   | $\Box$    |          | $\Box$   | $\Box$   |           |              | 149      |          |          |          |          |          | $\Box$          |              |
|  |          | 50       |          |          |                |          |          |  |  |          | الَــــــــــــــــــــــــــــــــــــ |            |            | 100      |                     | $\Box$   | $\perp$  | $\perp$  |           |          | [        |          | ╝         |              | 150      | Ш        |          |          |          |          | $\Box$          | $oxed{oxed}$ |